DEPARTMENT OF THE ARMY
OFFICE OF THE ASSISTANT SECRETARY OF THE ARMY
DEPUTY FOR INSTALLATIONS AND HOUSING
110 ARMY PENTAGON
WASHINGTON, DC 20310-0110

MAR 4 2010

SAIE-I&H

MEMORANDUM FOR

CHIEF OF ENGINEERS (DAEN), 2600 ARMY PENTAGON. WASHINGTON DC 20310
ASSISTANT CHIEF OF STAFF FOR INSTALLATION MANAGEMENT (DAIM-Z),
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INSTALLATION MANAGEMENT COMMAND (IMDC)
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SUBJECT: Construction/Renovation and Condition Standards for Residential Communities Initiative (RCI) Family Housing Program—Update # 3.

1. Reference policy of 06 January 2005; subject Minimum Construction/Renovation and Condition Standards for Residential Communities Initiative (RCI) Family Housing Program—Update # 2.

2. The purpose of this memorandum is to replace the referenced construction/renovation and condition standards. These new construction/renovation and condition standards (enclosure) apply to all homes on RCI installations. The updated standards apply to all work that may be required to new and existing units that will be retained after the initial development phase of the project.

3. These standards will be referenced in future documents that establish the RCI partnerships. These standards were selected to meet or exceed ISR standards.

4. I appreciate all of the efforts and the dedication that you and your staffs have devoted to the RCI program and are confident the changes addressed in this policy will contribute to even greater success on future projects. This policy will be reviewed, updated, and re-published every two years or as needed.

Encl

Joseph F Calcara
Deputy Assistant Secretary of the Army
Privatization & Partnerships

THE ARMY'S RESIDENTIAL COMMUNITIES INITIATIVE

Quality communities for Army families.

STANDARDS FOR HOUSING AT RCI PROJECTS
UPDATE #3

1. The Army has adopted standards that apply to the construction, renovation and condition of privatized housing. Compliance with each of these standards is mandatory unless the Assistant Secretary of the Army, Installations and Housing ASA I&E (I&H) office approves a waiver in writing, on a case-by-case basis. All standards are minimums and not intended to limit projects from exceeding these standards except for executive homes which include a minimum and maximum square foot range as stated in the attached matrix.

2. The standards are provided in a matrix format with a checkmark indicating the applicability of specific standards. Use the RCI Construction Standards, RCI Renovation Standards, and RCI Condition Standards in the following situations:

a. Apply the RCI Construction Standards anytime a housing unit is built new or renovated.

b. Apply the RCI Renovation Standards to all homes. If the house receives significant renovation/expansion then consideration will be given to meeting as many of the Construction Standards as possible, exceptions to renovation standards must be approved by the ASA I&E (I&H).

c. Apply the RCI Condition Standards during the IDP and at all times thereafter.

d. Historic units will meet the renovation standards as stated in this document, however they must also meet the tenets of the programmatic agreement with respective State Historic Preservation Offices. If there are conflicts, the programmatic agreement governs.

3. Several issues and definitions apply to all RCI projects as follows:

a. Complete all new construction or major alterations/renovations in accordance with local building codes and standards. In instances where multiple codes apply, such as two adjacent cities, an adjacent city and a county, or even multiple states, then the RCI project team will select the applicable code(s).
RCI projects will comply with the:

- National Electric Code (NEC)
- National Fire Protection Association (NFPA) Code

- Fire Administration Authorization Act
- Uniform Federal Accessibility Standards (UFAS)
- Architectural Barriers Act
- Americans with Disabilities Act Accessibility Guidelines (ADAAG)
- Unified Facilities Criteria Design
- General Building Requirements
- U.S. Green Building Council, Leadership in Energy and Environmental Design (LEED-H) (Homes) capable of achieving a minimum "SILVER" rating system and (LEED- (for new construction)NC) Neighborhood Community Center designs capable of achieving a minimum "SILVER" rating)
- Department of Defense Anti-Terrorism Standards for Buildings (Unified Facilities Code (UFC), UFC 4-010-01, under Mil-Std-3007) (The minimum standards should be applied to high-occupancy building types and to community centers (primary gathering buildings) and neighborhood centers where occupancy is routinely occupied and exceeds 50 or more Department of Defense (DOD) personnel
- American Society of Heating, Refrigeration, and Air Conditioning Engineers (ASHRAE)
- Energy Star Certified (USEPA Energy Star Program) standards for residential applications.

These codes/standards will be supplemented/modified by local codes as interpreted and local best practices.

b. Many installations have published guidelines and construction standards (e.g. Installation Design Guide) that may exceed or differ substantially from local codes and standards. It is the Army's intent that installation practices and policies apply to RCI projects unless waived by appropriate installation authorities. If an installation guideline or standard appears unreasonable for an RCI project and a consensus solution cannot be reached at the installation level, the Headquarters Army may be consulted in resolving the conflicting standards.

c. Gross floor area (also gross square feet or GSF) is defined as the total area measured within the exterior faces of exterior walls, or the center line of party walls between dwelling units. GSF includes both finished and unfinished spaces including stairways, but excluding: garages, carports, openings to the floor below, crawl spaces, unconditioned basements, floored attic areas below five feet of ceiling height, exterior bulk storage, trash enclosures, open or insect-screened porches, terraces, patios, decks, balconies and entrance stoops.

d. Usable floor area (also usable square feet or USF) is defined as the total area of a room measured within the interior face of perimeter walls, or the intended dividing line between distinct space uses such as the living room and the dining room and excluding closets. All interior space calculations should be in terms of USF.

e. A bathroom is defined as having a water closet, sink and a shower; however, all homes will have at least one bathroom with a bathtub and shower fixture (bathtub and shower may be combined). A half-bathroom or powder room is defined as having a water closet and sink.

f. Manufactured houses never had an axle. Manufactured homes are allowed subject to compliance with minimum construction standards and all applicable codes.

4. Projects not meeting one or more of the standards included in this document must request an exception to the standards from the ASA I&E (I&H) in advance of the execution of work. Forward request from the RCI managing partner to the appropriate Army Installation/Headquarters manager and include as a minimum: the standard to be waived, the Garrison Commander's concurrence with the proposed waiver, cost analysis associated with meeting the standard and any mitigating circumstances. Waivers must be approved before change can be made. Requests, which state that the reason for the waiver is that materials have already been ordered, or building almost complete will not be looked upon favorably.

5. These standards apply to RCI construction/renovation projects designed after 15 March, 2010.

Final - March 2010

ARMY Standards for RCI Projects	New Contruction	Renovation	Condition
Sites and Grounds			
Parking for each home			
min 10' wide and min 20' long (construction standard)	**Yes**	None	None
one or two car garage w/storage area - garage door to have automatic opener w/remote (construction standard)	**Yes**	None	None
two off-street paved spaces - 2nd space not block 1st space (construction & renovation standard)	**Yes** - (includes garage)	**Yes** - (includes garage or carport) - when practical	None
free from potholes and minimal cracking which does not affect functionality (condition standard)	None	None	**Yes**
Guest Parking			
min 1 space / home of low density (construction standard)	**Yes**	None	None
min 0.5 space / home of mid density (construction standard)	**Yes**	None	None
min .25 space / home of high density and renovation (construction & renovation standard)	**Yes**	**Yes**	None
Sidewalks			
on street side w/ housing (construction & renovation standard)	**Yes**	**Yes**- - when practical during renovations.	None
walkways to amenities (playground, community activities, etc) (construction & renovation standard)	**Yes**	**Yes**	None
hard surface in good condition (construction, renovation & condition standard)	**Yes**	**Yes**	**Yes**
Curbs & Street Gutters			
both sides of roads (construction standard)	**Yes**	None	None
depressed curb opening at driveway entrances (construction & renovation standard)	**Yes**	**Yes**	None
comply with local codes and UFAS (construction & renovation standard)	**Yes**	**Yes**	None
curbs in good condition (condition standard)	None	None	**Yes**
Lights - Street, Parking & Playground			
located at each street intersection (construction standard)	**Yes**	None	None
residential style (construction & renovation standard)	**Yes**	**Yes**	None

ARMY Standards for RCI Projects	New Contruction	Renovation	Condition
energy efficient (construction & renovation standard)	**Yes**	**Yes**	None
photoelectric sensors (construction & renovation standard)	**Yes**	**Yes**	None
reasonable intervals (construction & renovation standard)	**Yes**	**Yes**	None
in good condition (condition standard)	None	None	**Yes**
Utilities			
conform to appropriate codes with all local reqts (construction standard)	**Yes**	None	None
buried cables and underground services in new housing areas (construction standard)	**Yes**	None	None
200 AMP electric service minimum (construction standard)	**Yes**	None	None
150 AMP electric service min (renovation standard)	None	**Yes**	None
exterior or remote reading electric and gas (if used) meters (construction & renovation standard)	**Yes**	**Yes**	None
fire hydrants meet installation fire department standards (construction & renovation standard)	**Yes**	**Yes**	None
water pressure adequate (condition standard)	None	None	**Yes**
bldg service lines (electric, telephone, TV) underground in good condition (renovation & condition standard)	None	**Yes**	**Yes**
drainage systems operate without leak or blockage (condition standard)	None	None	**Yes**
Landscaping			
native plantings, trees, grass (construction standard)	**Yes**	**Yes**	None
drought tolerant, xeriscape or other as appropriate to climate (construction standard)	**Yes**	**Yes**	None
water-efficient practices as appropriate to climate (construction & renovation standard)	**Yes**	**Yes**	None
low maintenance (construction & renovation standard)	**Yes**	**Yes**	None
invasive species review before selection (construction & renovation standard)	**Yes**	**Yes**	None
min adverse effects to natural habitat (construction & renovation standard)	**Yes**	**Yes**	None
retain existing trees as much as possible (construction & renovation standard)	**Yes**	**Yes**	None
retain existing natural vegetation as much as possible (construction & renovation standard)	**Yes**	**Yes**	None
avoid construction in wetlands - state, local fed reqts (construction standard)	**Yes**	None	None

ARMY Standards for RCI Projects				New Contruction	Renovation	Condition
prepare and execute fully developed landscaping plan (construction & renovation standard)				**Yes**	**Yes**	None
landscaping to be in good condition and maintained per plan (condition standard)				None	None	**Yes**
Amenities - Playgrounds, Tot Lots & Parks						
amenities in housing area: ex: basketball courts, tennis courts, jogging/bike trails (construction & renovation standard)				**Yes**	**Yes**	None
accessible w/o crossing major streets (construction & renovation standard)				**Yes**	**Yes**	None
fence area if located w/in 100' of major street (construction & renovation standard)				**Yes**	**Yes**	None
equipment comply with ADAAG and consumer safety performances specs (construction & renovation standard)				**Yes**	**Yes**	None
maintained in good condition (condition standard)				None	None	**Yes**
Housing Density Guidelines (unit/acre) (not including roads & parks)						
units/acres:	low density	medium density	high density			
SSG & below	4-7	8-10	11-15	**Yes**	None	None
SFC-SGM	3-5	6-9	10-12	**Yes**	None	None
LT-CPT	3-5	6-9	10-12	**Yes**	None	None
MAJ-LTC	2.5-3	4-5	6-9	**Yes**	None	None
COL	2	3	4-6	**Yes**	None	None
BG & above	1	2	3-4	**Yes**	None	None
Other						
paving, including driveways, comply w/local codes (construction standard)				**Yes**	None	None
street setbacks comply with local codes (construction standard)				**Yes**	None	None
exterior colors, signs, streetscapes fit neighborhood theme -- IAW installation design guide (construction & renovation standard)				**Yes**	**Yes**	None
employ termite/wood-destroying insect-resistant design/materials IAW local codes and practices (construction & renovation standard)				**Yes**	**Yes**	None
paving and amenities maintained in good condition (condition standard)				None	None	**Yes**
Building Exterior & Foundation						
Provide vapor barrier/diffusion retarder as appropriate				**Yes**	None	None
Energy efficient front entrance door 3 ft. min, peepholes required unless door has window (construction standard)				**Yes**	None	None

ARMY Standards for RCI Projects	New Contruction	Renovation	Condition
door bell provided at front door (construction standard)	**Yes**	None	None
Energy efficient exterior doors to be steel or fiberglass (construction standard)	**Yes**	None	None
high quality siding resistant to rot (construction standard)	**Yes**	None	None
fungus resistant roof (construction standard)	**Yes**	None	None
easily accessible hose bibs and exterior electrical outlets on the front and rear of house (construction standard)	**Yes**	None	None
garage door between garage and dwelling unit to be 3 ft min and fire rated (construction standard)	**Yes**	None	None
operable windows have removable screens and are cleanable from the inside (construction standard)	**Yes**	None	None
double pane windows as appropropriate for climate and in good condition (construction, renovation & condition standard)	**Yes**	Yes- when practical during renovations	Yes
GFIC outlet and switched light at each outside door of house (construction & renovation standard)	**Yes**	**Yes**	None
GFIC outlet in or near outside door of garage (construction standard)	**Yes**	None	None
25-year min life expectancy for roofs (construction & renovation standard)	**Yes**	**Yes**	None
gutters, downspouts and splash blocks in place and operable (construction, renovation & condition standard)	**Yes**	**Yes**	**Yes**
basements and/or crawl spaces are dry and ventilated (construction, renovation & condition standard)	**Yes**	**Yes**	**Yes**
finish grading to slope away from structure (construction, renovation & condition standard)	**Yes**	Yes - when practical during renovations.	Yes - when practical
roof in good condition with no visible sign of leakage (condition standard)	None	None	**Yes**
exterior finish has no significant sign of distress (condition standard)	None	None	**Yes**
Patios, Bulk Storage & Trash Storage Areas			
dwelling has secure, well lit and dry bulk storage (min 500 cu ft) inside garage or accessible from outside of garage (construction standard)	**Yes**	**Yes**	None
trash storage inside garage if space permits otherwise outside visually screened (construction standard)	**Yes**	None	None
visually screened trash container with adequate capacity and within reasonable distance from entrance of residence (construction & renovation standard)	**Yes**	**Yes**	None
72 SF min balcony for apartments min 6 ft deep (construction standard)	**Yes**	**Yes**	None
150 SF min deck or patio on all single family or town homes (construction standard)	**Yes**	**Yes**	None
privacy screening between decks or patios (construction & renovation standard)	**Yes**	**Yes**	None

ARMY Standards for RCI Projects	New Contruction	Renovation	Condition
patios, storage and trash areas maintained in good condition (condition standard)	None	None	**Yes**
Interior Finishes			
doors and trim shall be finished either natural or with a semi-gloss paint (construction standard)	**Yes**	**Yes**	None
avoid conflicting door swings (construction & renovation standard)	**Yes**	**Yes**	
all doors open and close freely while maintining seal and avoid conflicting door swings (condition standard)	None	None	**Yes**
doors, trim wall and ceiling finishes are free of holes and stains (condition standard)	None	None	**Yes**
floor coverings are free of holes and stains (condition standard)	None	None	**Yes**
no lead based paint is exposed (condition standard)	None	None	**Yes**
Bathrooms			
minimum of 1 master bathroom (larger than others) and another full bathroom all houses (construction standard)	**Yes**	None	None
tub and shower combination and double sink in master bath (construction standard)	**Yes**	None	None
flooring of sheet vinyl or non-skid tile	**Yes**	**Yes**	None
three, or more, bedroom units have at least two full bathrooms (construction & renovation standard)	**Yes**	**Yes**	None
a half bathroom min on each floor of a house (construction & renovation standard)	**Yes**	**Yes** - when practical during renovations.	None
exhaust fan to the outside (construction & renovation standard)	**Yes**	**Yes**	None
GFIC outlet (construction & renovation standard)	**Yes**	**Yes**	None
min 1 mirror, w/ light, above each sink and one medicine cabinet or closet per bathroom (construction & renovation standard)	**Yes**	**Yes**	None
all fixtures functional (condition standard)	None	None	**Yes**
Kitchen			
design considers efficient work triangle (construction standard)	**Yes**	**Yes** - when practical during renovations.	None
refrigerator with ice maker, dishwasher, range and garbage disposal (construction standard)	**Yes**	None	None
double compartment sink min 7 inches deep (construction standard)	**Yes**	None	None
range hood with light and two speed low noise fan (construction standard)	**Yes**	None	None
no carpet as flooring (construction & renovation standard)	**Yes**	**Yes**	None
eating space in breakfast bar or dining room adjoining kitchen (construction & renovation standard)	**Yes**	Yes - when practical during renovations.	None
laundry facilities not located in the kitchen, bedroom or bathroom (construction & renovation standard)	**Yes**	**Yes**	None
appliances meet energy star (construction & renovation standard)	**Yes**	**Yes**	None

ARMY Standards for RCI Projects	New Contruction	Renovation	Condition
GFIC outlet for small appliances (construction & renovation standard)	**Yes**	**Yes**	None
cabinets and countertops are without damage or large scratches (condition standard)	None	None	**Yes**
appliances in good condition (condition standard)	None	None	**Yes**
Bedrooms			
min of three bedrooms (construction standard)	**Yes**	None	None
master bedroom min 150 NSF other bedrooms min 120 NSF (construction standard)	**Yes**	None	None
walk-in closet for master bedroom (construction standard)	**Yes**	None	None
closet space is adequate for each bedroom (construction & renovation standard)	**Yes**	**Yes**	None
bedrooms are of adequate size (90 NSF min with larger master bedroom) (renovation standard)	None	**Yes**	None
Laundry Room & Closets			
within unit, in a separate room or closet, with connections for washer and dryer; with adequate space for washing machine, dryer and laundry basket and shelving provided (construction standard & renovation standard)	**Yes**	**Yes**	None
dryer vented to the outside of home (construction & renovation standard)	**Yes**	**Yes**	None
laundry facilities not located in the kitchen, bedroom or bathroom (construction & renovation standard)	**Yes**	**Yes**	None
General			
individual circuits, interconnected w/battery backup for smoke/carbon monoxide detectors (construction standard)	**Yes**	**Yes**	None
switched light fixtures in each room and hallways (construction standard)	**Yes**	**Yes** - when practical during renovations.	None
energy efficient lighting fixtures	**Yes**	**Yes**	None
ceiling mounted light boxes capable of fan in bedrooms, family and dining rooms (construction standard)	**Yes**	None	None
energy efficient HVAC system, water heater and applicanes	**Yes**	**Yes** - when practical during renovations.	None
programmable (set-back) thermostats in new construction, and major revitalizations	**Yes**	**Yes** - when practical during renovations.	None
two story homes designed with separate air distribution for first and second floors (construction standard)	**Yes**	None	None
supply air vents for HVAC have adjustable dampers (construction standard)	**Yes**	**Yes**	None
air filters for HVAC easy to change by residents.	**Yes**	**Yes**	**Yes**
min 40 gal hot water heater for 3 bdrm and 50 gal hot water heater for 4-5 bdrm (construction standard)	**Yes**	None	None

ARMY Standards for RCI Projects	New Contruction	Renovation	Condition
drains for air-conditioning condensation, humidifier overflow, occupant-supplied washing machines, and water heater drain and relief valve that should discharge to exterior or to waste water drain	**Yes**	**Yes**	None
3 ft min coat closet near entrance and 2 ft min linen closet provided near bedroom (construction standard)	**Yes**	None	None
mechanical room accessible from outside unit (when practical) (construction standard)	**Yes**	None	None
Provide an interior shut-off valve on water supply line entering each residence (construction standard)	**Yes**	None	None
telephone and television outlets in family room, living room, kitchen and all bedrooms (construction standard)	**Yes**	**Yes**	None
hardwired for internet service (construction standard)	**Yes**	None	None
radon control if required (construction & renovation standard)	**Yes**	**Yes**	None
street address displayed on each unit (construction & renovation standard)	**Yes**	**Yes**	None
shut-off valve angle stops at all hot and cold water connections to fixtures (construction & renovation standard)	**Yes**	**Yes**	None
water piping in exterior walls, attics or crawl spaces is insulated in freezing conditions (construction & renovation standard)	**Yes**	**Yes**	None
no glued-down carpets (except ADA units) (construction, renovation & condition standard)	**Yes**	**Yes**	None
HVAC maintains indoor temperature within acceptable range in each room (condition standard)	None	None	**Yes**
sound attenuation between town homes or apartments (construction & renovation standard)	**Yes**	**Yes**	None
lighted entrance foyer with closet located adjacent to living room with access to other areas w/o passing thru living room	**Yes**	None	None
hallways and stairways accommodate moving a queen-size box spring	**Yes**	None	None
Housing Square Footage Requirements			
minimum of 3 bedrooms in all homes (construction standard)	**Yes**	**Yes** - when practical during renovations.	None
three bedroom: 1,630 GSF minimum	**Yes**	None	None
four bedroom: 1,940 GSF minimum		None	None
five bedroom: 2,300 GSF minimum		None	None
Executive Home (O 7 & 8) : 3500 min - 3800 max GSF	**Yes**	None	None
Executive Home (O 9&10): 3800 min - 4500 max GSF	**Yes**	None	None